

CONFIDENTIAL

CLASSIFICATION CONFIDENTIAL

CENTRAL INTELLIGENCE AGENCY A REPORT

INFORMATION FROM

FOREIGN DOCUMENTS OR RADIO BROADCASTS CND NO.

50X1-HUM

COUNTRY Bulgaria; Yugoslavia DATE OF INFORMATION 1951

SUBJECT Economic - Ferrous and nonferrous metallurgy

HOW PUBLISHED Daily newspapers DATE DIST. 17 Apr 1951

WHERE PUBLISHED Bulgaria; Yugoslavia NO. OF PAGES 2

DATE PUBLISHED 10, 15 Feb 1951

LANGUAGE Bulgarian; Serbo-Croatian SUPPLEMENT TO REPORT NO.

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANINGS OF ESPIONAGE ACT 50 U. S. C. 31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. REPRODUCTION OF THIS FORM IS PROHIBITED.

THIS IS UNEVALUATED INFORMATION

SOURCE Newspapers as indicated.

BULGARIAN DEVELOPS NEW METAL-MELTING PROCESS;
YUGOSLAVIA HAS ABUNDANT REFRACTORY RAW MATERIALS

DEMONSTRATE NEW METHOD -- Sofia, Izgrev, 10 Feb 51

Demonstrations of a new process for melting metals were carried out successfully at the Pirola electrochemical cooperative in Sofia on 19 January 1951. The so-called combined universal method for the electrical heating, welding, and melting of metals was invented by Khenrikh Andreev, who had studied the new method used for these operations in the USSR according to Kuznetsov's techniques. As a result of this research, Andreev invented a carbonic mixture which replaces the electrical conductor, does not wear off, and has many other valuable qualities. The mixture is in the form of a black powder, which is spread on the bottom of a ceramic vessel containing the metal. After the electric switch is turned on, the metal melts in half a minute, with a minimum consumption of electricity.

The new process will also be used to replace electric wiring in household appliances, and will do away with foundry furnaces for melting metals under high temperatures. It will cut down the import of expensive foreign coke. The powder will now be used for all metal heating, welding, and melting operations, regardless of voltage, as the mixture reacts in the same manner under 20 or 600 volts, without the use of transformers or rheostats. The metals are heated, usually, in only 30-35 seconds, and the melting process starts immediately afterward.

It also has been noted that the inside surfaces of the container remained moderately warm during the entire process, and the outside surfaces were cold. That proves that only those parts of the metal which are in direct contact with the mixture are heated. This will permit the hardening of some special types of steel used in files, saws, etc. The process will also be used in welding streetcar rails, all types of pipe, all processes requiring slow or quick heating, etc. Considerable savings are expected from the new method.

- 1 -

CONFIDENTIAL

CLASSIFICATION		CONFIDENTIAL		DISTRIBUTION									
STATE	<input checked="" type="checkbox"/>	NAVY	<input checked="" type="checkbox"/>	NRB									
ARMY	<input checked="" type="checkbox"/>	AIR	<input checked="" type="checkbox"/>	FBI									

CONFIDENTIAL
CONFIDENTIAL

50X1-HUM

ESTIMATE 200 MILLION TONS OF REFRACTORY RAW MATERIAL -- Belgrade, Borba,
15 Feb 51

It is estimated that there are 200 million tons of refractory raw materials in Yugoslavia. The "Magnohrom" Factory, which is being built to exploit some of these resources, will begin the production of magnesite, chromite, and chromium magnesite bricks at the beginning of 1952.

- E N D -

- 2 -

CONFIDENTIAL

CONFIDENTIAL